## **SIEMENS**

## **Data sheet**

product brand name

3RA2435-8XH32-1NB3

Contactor assembly for star-delta (wye-delta) start, AS-i AC-3, 37 kW/400 V, 20-33 V AC/DC 3-pole, Size S2 Screw terminal Electrical and mechanical interlock 3 NO + 3 NC integrated



In a second second			
product designation	Contactor assembly for star-delta (wye-delta) start		
product type designation	3RA24		
manufacturer's article number			
<ul> <li>1 of the supplied contactor</li> </ul>	3RT2035-1NB30-0CC0		
<ul> <li>2 of the supplied contactor</li> </ul>	3RT2035-1NB30		
<ul> <li>3 of the supplied contactor</li> </ul>	<u>3RT2027-1BB40</u>		
<ul> <li>of the supplied RS assembly kit</li> </ul>	3RA2933-2C		
<ul> <li>of the supplied function module for communication</li> </ul>	3RA2712-1CA00		
General technical data			
size of contactor	S2		
product extension auxiliary switch	No		
shock resistance at rectangular impulse			
• at DC	7.7g / 5 ms, 4.5g / 10 ms		
shock resistance with sine pulse			
• at DC	12g / 5 ms, 7g / 10 ms		
mechanical service life (operating cycles)			
of contactor typical	10 000 000		
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000		
reference code according to IEC 81346-2	Q		
Substance Prohibitance (Date)	10/01/2014		
Ambient conditions			
installation altitude at height above sea level maximum	2 000 m		
ambient temperature			
during operation	-25 +60 °C		
during storage	-55 +80 °C		
Main circuit			
number of poles for main current circuit	3		
number of NO contacts for main contacts	3		
number of NC contacts for main contacts	0		
operating voltage			
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V		
operational current			
• at AC-3			
— at 400 V rated value	80 A		
operating power			
• at AC-3			
— at 400 V rated value	37 kW		
operating frequency			
at AC-3 maximum	1 000 1/h		

SIRIUS

Control circuit/ Control			
type of voltage of the control supply voltage	AC/DC		
control supply voltage 1 at AC			
• at 50 Hz	20 33 V		
• at 60 Hz	20 33 V		
	20 33 V		
control supply voltage 1  • at DC	20 33 V		
design of the surge suppressor	with varistor		
apparent pick-up power of magnet coil at AC	00.1/4		
• at 50 Hz	82 VA		
• at 60 Hz	82 VA		
inductive power factor with closing power of the coil	2.24		
• at 50 Hz	0.64		
• at 60 Hz	0.5		
apparent holding power of magnet coil at AC			
• at 50 Hz	6 VA		
• at 60 Hz	6 VA		
inductive power factor with the holding power of the coil			
• at 50 Hz	0.36		
• at 60 Hz	0.39		
closing power of magnet coil at DC	28 W		
holding power of magnet coil at DC	4 W		
Auxiliary circuit			
number of NC contacts for auxiliary contacts			
instantaneous contact	3		
number of NO contacts for auxiliary contacts			
instantaneous contact	3		
contact reliability of auxiliary contacts	< 1 error per 100 million operating cycles		
UL/CSA ratings			
contact rating of auxiliary contacts according to UL	A600 / Q600		
Short-circuit protection			
design of the fuse link			
<ul> <li>for short-circuit protection of the main circuit</li> </ul>			
<ul> <li>— with type of coordination 1 required</li> </ul>	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A		
<ul><li>— with type of coordination 1 required</li><li>— with type of assignment 2 required</li></ul>	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A		
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— with type of assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A		
with type of assignment 2 required     for short-circuit protection of the auxiliary switch required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing • with side-by-side mounting	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm		
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— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing • with side-by-side mounting — forwards	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing  • with side-by-side mounting — forwards — backwards	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth  required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 10 mm 10 mm 10 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth  required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side  • for grounded parts — forwards	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 10 mm 10 mm 10 mm 10 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side  • for grounded parts — forwards — backwards — backwards — backwards	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side  • for grounded parts — forwards — backwards — upwards — backwards — upwards — at the side • for grounded parts — forwards — backwards — upwards	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
<ul> <li>with type of assignment 2 required</li> <li>for short-circuit protection of the auxiliary switch required</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>with side-by-side mounting</li> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>at the side</li> <li>backwards</li> <li>upwards</li> <li>at the side</li> </ul>	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth  required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side  • for grounded parts — forwards — backwards — upwards — at the side  • for wards — backwards — backwards — at the side — downwards — at the side — downwards	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth  required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side  • for grounded parts — forwards — backwards — upwards — at the side  • for grounded parts — forwards — backwards — upwards — backwards — upwards — backwards — upwards — at the side — downwards — at the side — downwards	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side  • for grounded parts — forwards — backwards — upwards — at the side  • for grounded parts — forwards — backwards — upwards — backwards — upwards — forwards — forwards — odownwards — at the side — downwards • for live parts — forwards	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
— with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side  • for grounded parts — forwards — backwards — upwards — at the side  • for grounded parts — forwards — at the side — downwards — at the side — downwards — at the side — downwards  • for live parts — forwards — backwards — backwards	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gG: 10 A  +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw fixing 142 mm 177.5 mm 223 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm		

— at the side		10 mm				
Connections/ Terminals						
type of electrical connection						
<ul> <li>for main current circuit</li> </ul>		screw-type terminals				
<ul> <li>for auxiliary and control circuit</li> </ul>		screw-type terminals				
<ul> <li>at contactor for auxiliary contacts</li> </ul>		Screw-type terminals				
of magnet coil		Screw-type terminals				
type of connectable conductor cross-sections for	main contacts					
• solid		2x (1 35 mm²), 1x (1 50 mm²)				
<ul> <li>solid or stranded</li> </ul>		2x (1 35 mm²), 1x (1 50 mm²)				
<ul> <li>finely stranded with core end processing</li> </ul>		2x (1 25 mm²), 1x (1 35 mm²)				
type of connectable conductor cross-sections	;					
<ul> <li>for auxiliary contacts</li> </ul>						
<ul> <li>solid or stranded</li> </ul>		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)				
<ul> <li>finely stranded with core end process</li> </ul>	ing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)				
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>		2x (20 16), 2x (18 14)				
Safety related data						
B10 value with high demand rate according to SN	I 31920	1 000 000				
proportion of dangerous failures						
<ul> <li>with low demand rate according to SN 31920</li> </ul>		40 %				
with high demand rate according to SN 319	920	73 %				
failure rate [FIT] with low demand rate according	to SN 31920	100 FIT				
T1 value for proof test interval or service life acco	rding to IEC	20 a				
protection class IP on the front according to IEC 60529		IP20				
touch protection on the front according to IEC 60529		finger-safe, for vertical contact from the front				
Communication/ Protocol						
product function bus communication		No				
protocol is supported AS-Interface protocol		Yes				
product function control circuit interface with IO lin	nk	No				
Certificates/ approvals						
General Product Approval	Declaration of Conformity		Test Certificates	Marine / Shipping		

Confirmation







Type Test Certificates/Test Report



other Dangerous Good

<u>Confirmation</u> <u>Transport Information</u>

## **Further information**

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2435-8XH32-1NB3

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2435-8XH32-1NB3

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

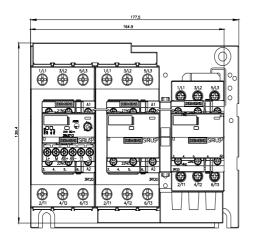
https://support.industry.siemens.com/cs/ww/en/ps/3RA2435-8XH32-1NB3

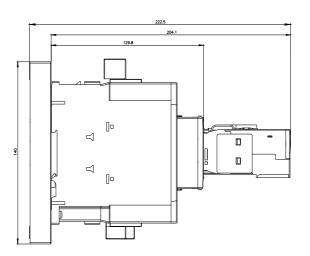
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

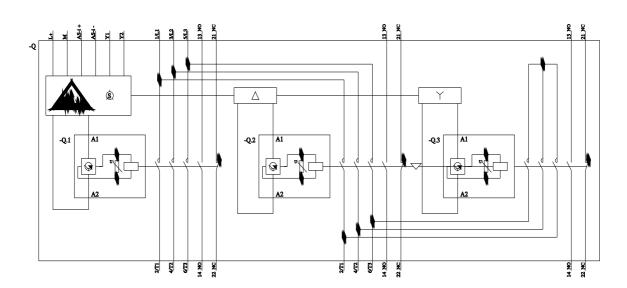
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2435-8XH32-1NB3&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2435-8XH32-1NB3/char







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